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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

LEE, TOMMY D

ART UNIT PAPER NUMBER

2624

DATE MAILED: 06/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/710,404

Applicant(s)

HAINES ET AL.

Examiner

Thomas D. Lee

Art Unit

2624

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>4</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 1-4, 7-12, 15-18, 21 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 4,167,322 (Yano et al.) in view of U.S. Patent 6,023,593 (Tomidokoro).

Regarding claim 1, Yano et al. disclose an image forming device comprising: storage circuitry configured to store an initial variable (non-volatile RAM provided a computer of one of a plurality of copying machines (column 4, lines 50-59)); imaging circuitry configured to consume the imaging consumable to form hard images (each copying machine consumes copy sheets, toner (column 2, lines 39-45, 54-65)); a

sensor configured to monitor a status of the imaging consumable and to output a signal indicative of the status (number of copy sheets, amount of toner sensed (column 3, lines 37-57), parameters output for display at any of the copying machines (column 4, lines 4-19)); processing circuitry configured to replace the initial variable with another variable, and to receive the signal from the sensor (keyboard provided for user to indicate parameters to be displayed (column 4, lines 15-19), selective viewing of only certain parameters or even only one parameter at a time (column 4, lines 4-10) suggest replacement of initial variable with another variable); and an interface configured to communicate externally of the image forming device (parameters of all copying machines may be monitored at any of the copying machines (communication of parameters through bus lines (column 4, lines 46-49)).

The storage and processing circuitry and interface disclosed in Yano et al. are not configured to store, process and communicate a variable *configured to control the formulation of an initial one or another one of a plurality of consumable order assist functions configured to assist replenishment of an imaging consumable*, as the disclosure is not concerned with communicating orders for replenishing copy sheets or toner. Tomidokoro discloses a consumable item supplying system, wherein upon receipt of a polling signal from a data communication apparatus, one of a plurality of copiers outputs a signal corresponding to consumables which need to be replenished, for transmission to a consumable item supplier via a central control device (read Abstract; column 6, lines 44-67). Tomidokoro, in response to the polling signal, automatically transmits a consumable order request when a consumable needs to be

replenished, thereby relieving a user of the responsibility of having to create and transmit such a request when a shortage of a consumable is detected at one of the copiers, which would be necessary in Yano et al. Therefore, it would have been obvious for one of ordinary skill in the art to modify the teaching of Yano et al. by providing a means for enabling a copying machine to create and transmit a consumable order request in the manner disclosed in Tomidokoro.

Regarding claims 2 and 3, one of the copying machines disclosed by Yano et al. receives parameter information from each of the other copying machines through bus lines (column 4, lines 42-49). In order to receive such information, the receiving copying machine must inherently use some type of "remote query language" for inquiring the information from the other copying machines, which are remote from the receiving copying machine. As for the use of a Simple Network Management Protocol, one of ordinary skill would have recognized this as just one of a number of ways that parameter information can be communicated between two apparatuses. It is not apparent from the applicant's specification that use of a Simple Network Management Protocol provides any advantage or unexpected result over another method for performing the same function. Therefore, it would have been obvious for one of ordinary skill in the art to use a Simple Network Management Protocol or any other known method in accordance with a user's preference.

Regarding claim 4, the imaging circuitry disclosed in Yano et al. comprises printer circuitry to print hard images upon media (copying machine includes printer (column 4, lines 62-65) with inherent printer circuitry).

Regarding claim 7, the processing circuitry disclosed in Tomidokoro is configured to formulate the another consumable order assist function comprising an order for the imaging consumable being monitored, and the processing circuitry is configured to forward the order to a predetermined location (data communicated from one of the copiers to a central control apparatus includes an information code representing amount and kind of consumable item requested (column 12, lines 27-48). While a code identifying the copier making the request is not explicitly disclosed, such a feature is well known in the art, and one of ordinary skill in the art would have readily recognized the need to provide such information, since it would be difficult to determine which copier made the request otherwise.

Regarding claim 8, Yano et al. disclose an image forming system comprising: an image forming device configured to consume an imaging consumable to form hard images (plural copying machines copy images onto copy sheets (column 2, lines 31-38)), to monitor a status of the imaging consumable (number of copy sheets, amount of toner sensed (column 3, lines 37-57), and to store an initial variable (non-volatile RAM provided a computer of one of a plurality of copying machines (column 4, lines 50-59)); and a host device coupled with the image forming device and configured to provide another variable to the image forming device, wherein the image forming device is configured to replace the initial variable with the another variable (keyboard provided in one of the copying machines for user to indicate parameters from any of the copying machines to be displayed (column 4, lines 11-19), selective viewing of only certain

parameters or even only one parameter at a time (column 4, lines 4-10) suggest replacement of initial variable with another variable).

As mentioned above with respect to claim 1, the copying machines disclosed in Yano et al. are not *configured to control the formulation of an initial one or another one of a plurality of consumable order assist functions configured to assist replenishment of an imaging consumable, responsive to the detection of a predetermined status of the imaging consumable*, as the disclosure is not concerned with communicating orders for replenishing copy sheets or toner. Tomidokoro discloses a consumable item supplying system, wherein upon receipt of a polling signal from a data communication apparatus, one of a plurality of copiers outputs a signal corresponding to consumables which need to be replenished, for transmission to a consumable item supplier via a central control device (read Abstract; column 6, lines 44-67). Tomidokoro, in response to the polling signal, automatically transmits a consumable order request when a consumable needs to be replenished, thereby relieving a user of the responsibility of having to create and transmit such a request when a shortage of a consumable is detected at one of the copiers, which would be necessary in Yano et al. Therefore, it would have been obvious for one of ordinary skill in the art to modify the teaching of Yano et al. by providing a means for enabling a copying machine to create and transmit a consumable order request in the manner disclosed in Tomidokoro.

Regarding claims 9 and 10, one of the copying machines disclosed by Yano et al. receives parameter information from each of the other copying machines through bus lines (column 4, lines 42-49), as mentioned above with respect to claims 2 and 3.

In order to receive such information, the receiving copying machine must inherently use some type of "remote query language" for inquiring the information from the other copying machines, which are remote from the receiving copying machine. As for the use of a Simple Network Management Protocol, one of ordinary skill would have recognized this as just one of a number of ways that parameter information can be communicated between two apparatuses. It is not apparent from the applicant's specification that use of a Simple Network Management Protocol provides any advantage or unexpected result over another method for performing the same function. Therefore, it would have been obvious for one of ordinary skill in the art to use a Simple Network Management Protocol or any other known method in accordance with a user's preference.

Regarding claim 11, the imaging circuitry disclosed in Yano et al. comprises printer circuitry to print hard images upon media (copying machine includes printer (column 4, lines 62-65) with inherent printer circuitry), as mentioned above with respect to claim 4.

Regarding claim 12, the image forming device disclosed in Tomidokoro is configured to formulate the another consumable order assist function (column 12, lines 27-48).

Regarding claim 15, the processing circuitry disclosed in Tomidokoro, as mentioned above with respect to claim 7, is configured to formulate the another consumable order assist function comprising an identifier of the image forming device and an order for the imaging consumable being monitored, and the processing circuitry

is configured to forward the order to a predetermined location (data communicated from one of the copiers to a central control apparatus includes an information code representing amount and kind of consumable item requested (column 12, lines 27-48). While a code identifying the copier making the request is not explicitly disclosed, such a feature is well known in the art, and one of ordinary skill in the art would have readily recognized the need to provide such information, since it would be difficult to determine which copier made the request otherwise.

Regarding claim 16, Yano et al. discloses a method of facilitating ordering of an imaging consumable useable within an image forming device comprising: providing an image forming device configured to use an imaging consumable to form hard images (each copying machine consumes copy sheets, toner (column 2, lines 39-45, 54-65)); providing an initial variable within the image forming device (non-volatile RAM provided a computer of one of a plurality of copying machines (column 4, lines 50-59)); replacing the initial variable with another variable within the image forming device (keyboard provided for user to indicate parameters to be displayed (column 4, lines 15-19), selective viewing of only certain parameters or even only one parameter at a time (column 4, lines 4-10) suggest replacement of initial variable with another variable); and detecting an amount of the imaging consumable being at a predetermined status (number of copy sheets, amount of toner sensed (column 3, lines 37-57).

The providing and replacing steps disclosed in Yano et al. are not disclosed to provide, replace and generate a variable *configured to control the formulation of an initial one or another one of a plurality of consumable order assist functions configured*

to assist replenishment of an imaging consumable, as the disclosure is not concerned with communicating orders for replenishing copy sheets or toner. As mentioned with respect to claim 1, Tomidokoro discloses a consumable item supplying system, wherein upon receipt of a polling signal from a data communication apparatus, one of a plurality of copiers outputs a signal corresponding to consumables which need to be replenished, for transmission to a consumable item supplier via a central control device (read Abstract; column 6, lines 44-67). Tomidokoro, in response to the polling signal, automatically transmits a consumable order request when a consumable needs to be replenished, thereby relieving a user of the responsibility of having to create and transmit such a request when a shortage of a consumable is detected at one of the copiers, which would be necessary in Yano et al. Therefore, it would have been obvious for one of ordinary skill in the art to modify the teaching of Yano et al. by providing a means for enabling a copying machine to create and transmit a consumable order request in the manner disclosed in Tomidokoro.

Regarding claim 17, one of the copying machines disclosed by Yano et al. receives parameter information from each of the other copying machines through bus lines (column 4, lines 42-49), as mentioned above with respect to claim 2. In order to receive such information, the receiving copying machine must inherently use some type of "remote query language" for inquiring the information from the other copying machines, which are remote from the receiving copying machine.

Regarding claim 18, the imaging circuitry disclosed in Yano et al. comprises printer circuitry to print hard images upon media (copying machine includes printer

(column 4, lines 62-65) with inherent printer circuitry), as mentioned above with respect to claim 4.

Regarding claim 21, the processing circuitry disclosed in Tomidokoro, as mentioned above with respect to claim 7, is configured to formulate the another consumable order assist function comprising an identifier of the image forming device and an order for the imaging consumable being monitored, and the processing circuitry is configured to forward the order to a predetermined location (data communicated from one of the copiers to a central control apparatus includes an information code representing amount and kind of consumable item requested (column 12, lines 27-48). While a code identifying the copier making the request is not explicitly disclosed, such a feature is well known in the art, and one of ordinary skill in the art would have readily recognized the need to provide such information, since it would be difficult to determine which copier made the request otherwise.

Regarding claim 22, Tomidokoro discloses generation using the image forming device (as mentioned with respect to claim 1, Tomidokoro discloses a consumable item supplying system, wherein upon receipt of a polling signal from a data communication apparatus, one of a plurality of copiers outputs a signal corresponding to consumables which need to be replenished, for transmission to a consumable item supplier via a central control device (read Abstract; column 6, lines 44-67).

4. Claims 5, 6, 13, 14, 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yano et al. in view of Tomidokoro as applied to claims 1, 8 and 16 above, and further in view of U.S. Patent 6,108,099 (Ohtani).

Regarding claims 5, 13 and 19, the combined teaching of Yano et al. and Tomidokoro suggests an initial consumable assist function comprising an identifier of the image consumable being monitored (in Yano et al., parameters indicating remaining number of sheets and remaining amount of toner (column 3, lines 37-57) selectively displayed, one at a time (column 4, lines 4-10)). The combined teaching does not suggest an identifier of a supplier of the image consumable. Ohtani discloses storage of an initial consumable assist function including an e-mail address of a supplier of paper and toner (column 5, lines 39-48). As mentioned above with respect to Tomidokoro, automatically transmitting a consumable order request when a consumable needs to be replenished relieves a user of the responsibility of having to create and transmit such a request when a shortage of a consumable is detected at one of the copiers, which would be necessary in Yano et al. One of ordinary skill in the art would have recognized that In order for the request to be transmitted automatically from a copy machine to a supplier, an identifier of the supplier would need to be stored, and thus it would have been obvious to modify the combined teaching of Yano et al. and Tomidokoro by providing for storage of the identifier of a supplier, as disclosed in Ohtani, along with an identifier of the image consumable being monitored.

Regarding claims 6, 14 and 20, the combined teaching of Yano et al. and Tomidokoro suggests or would have rendered obvious another consumable order assist function comprising an identifier of the image forming device and an identifier of the image consumable being monitored (as mentioned above with respect to claim 7, the processing circuitry disclosed in Tomidokoro is configured to formulate the another

consumable order assist function comprising an order for the imaging consumable being monitored, and the processing circuitry is configured to forward the order to a predetermined location (data communicated from one of the copiers to a central control apparatus includes an information code representing amount and kind of consumable item requested (column 12, lines 27-48). While a code identifying the copier making the request is not explicitly disclosed, such a feature is well known in the art, and one of ordinary skill in the art would have readily recognized the need to provide such information, since it would be difficult to determine which copier made the request otherwise). The combined teaching does not suggest an identifier of a purchaser of the image consumable. Ohtani discloses an identifier of "where to notify of abnormal conditions" (column 5, lines 36-39). This refers to an official responsible for a fax machine that has transmitted an order request, (column 6, lines 16-36), and it is likely that this person would be responsible for purchasing the consumables identified in the request from the supplier. It would have been obvious for one of ordinary skill in the art to provide this information in a consumable order assist function, as disclosed in Ohtani, so that a supplier can identify who is responsible for paying for the purchase of the identified consumables in a consumable order assist function.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas D. Lee whose telephone number is (703) 305-4870. The examiner can normally be reached on Monday-Friday (7:30-5:00), alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David K. Moore can be reached on (703) 308-7452. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Thomas D. Lee
Primary Examiner
Art Unit 2624

tdl
June 10, 2004